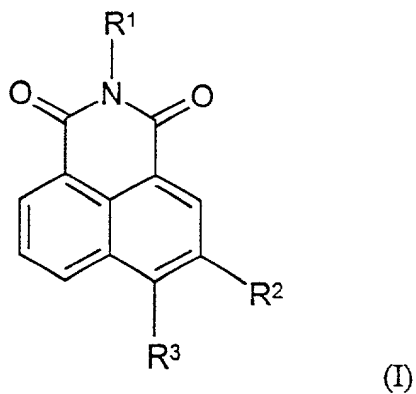


CLAIMS

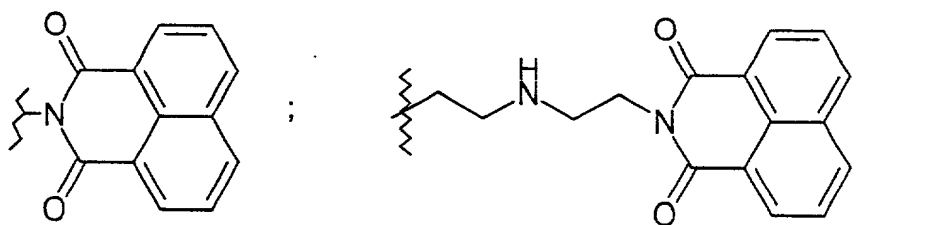
WE CLAIM:

- 5 1. A pharmaceutical composition comprising a compound of Formula I,

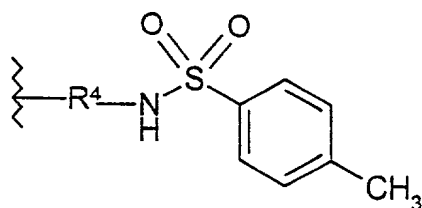


wherein

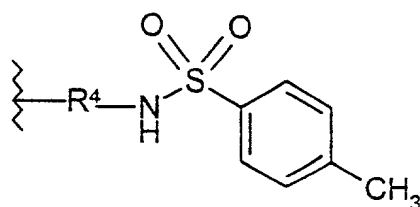
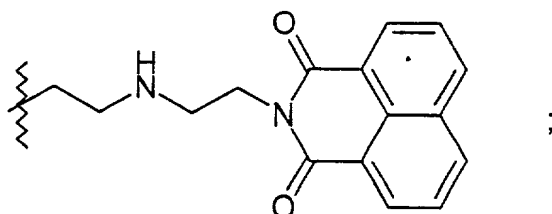
- 10 R¹ is selected from alkyl; aryl-loweralkyl; heterocycle-loweralkyl; loweralkyl-carbonate; amino optionally monosubstituted or disubstituted with a substituent selected from loweralkyl, aryl and hydroxyloweralkyl; benzimidaz-2-yl;



- 15 and



- wherein R^4 is phenyl optionally monosubstituted or disubstituted with a substituent selected from loweralkyl and halo; phenyl optionally monosubstituted or disubstituted with a substituent selected from amino, loweralkoxy, hydroxy and loweralkyl; $NHCH_2CH_2OX$ wherein X represents an *in vivo* hydrolyzable ester; and loweralkyl-
- 5 $(R^5)(R^6)$ wherein one of R^5 and R^6 is selected from H and loweralkyl and the other is selected from carboxy, carboxy-loweralkyl and loweralkoxycarbonyl; and R^2 and R^3 are independently selected from H, NO_2 , halo, di(loweralkyl)amino, cyano, $C(O)OH$, phenyl-S-, loweralkyl, and $Z(O)OR^7$ wherein Z is selected from C and S and R^7 is selected from H, loweralkylamino and arylamino;
- 10 and pharmaceutically acceptable salts thereof, in an amount effective to inhibit neurotrophin-mediated activity, and a suitable carrier.
2. A pharmaceutical composition according to claim 1, wherein R^1 is selected from alkyl; aryl-loweralkyl; heterocycle-loweralkyl; loweralkyl-carbonate; amino optionally
- 15 monosubstituted or disubstituted with a substituent selected from loweralkyl and hydroxyloweralkyl; benzimidaz-2-yl;



20

wherein R^4 is phenyl optionally monosubstituted or disubstituted with a substituent selected from loweralkyl and halo; phenyl optionally monosubstituted or disubstituted

with a substituent selected from amino, loweralkoxy, hydroxy and loweralkyl;
 NHCH₂CH₂OX wherein X represents an *in vivo* hydrolyzable ester; and loweralkyl-
 R⁵)(R⁶) wherein one of R⁵ and R⁶ is selected from H and loweralkyl and the other is
 selected from carboxy, carboxy-loweralkyl and loweralkoxy-carbonyl; and

- 5 R² and R³ are independently selected from H, NO₂, halo, di(loweralkyl)amino, and phenyl-S-.

3. A pharmaceutical composition according to claim 2, wherein R¹ is selected from
 aryl-loweralkyl; heterocycle-loweralkyl; loweralkyl-carbonate; amino optionally
 10 monosubstituted or disubstituted with a substituent selected from loweralkyl and
 hydroxyloweralkyl; benzimidaz-2-yl; NHCH₂CH₂OX wherein X represents an *in vivo*
 hydrolyzable ester; and loweralkyl-(R⁵)(R⁶) wherein one of R⁵ and R⁶ is selected from H
 and loweralkyl and the other is selected from carboxy, carboxy-loweralkyl and
 loweralkoxy-carbonyl; and
 15 R² and R³ are independently selected from H, NO₂, di(loweralkyl)amino, and phenyl-S-.

4. A pharmaceutical composition according to claim 3, wherein R¹ is selected from
 amino optionally monosubstituted or disubstituted with a substituent selected from
 loweralkyl and hydroxyloweralkyl; NHCH₂CH₂OX wherein X represents an *in vivo*
 20 hydrolyzable ester; and loweralkyl-(R⁵)(R⁶) wherein one of R⁵ and R⁶ is selected from H
 and loweralkyl and the other is selected from carboxy, carboxy-loweralkyl and
 loweralkoxy-carbonyl; and
 R² and R³ are independently selected from H and NO₂.

- 25 5. A pharmaceutical composition according to claim 1 wherein the compound of
 Formula I is selected from the group consisting of:

- N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;
 N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;
 30 N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

- N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;
 N-Furfuryl-1,8-naphthalimide;
 6-(N,N-Dimethylamino)-2-(benzimidazol-2-yl)naphthalimide;
 N-(Pyrid-2-ylethyl)-1,8-naphthalimide;
- 5 1,3-Dioxo-6-phenylmercapto-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro-
 benzo[i]isoquinoline;
 2-{2-(4-Methylphenylsulphonamido)phenyl}-6-(N,N-dimethylamino)-
 naphthalimide;
- 10 1,3-Dioxo-2-{2-(4-methylphenylsulphonamido)phenyl}-1,2,3,4-tetrahydro-
 benzo[i]isoquinoline;
 N-Octyl-5-nitronaphthalimide;
 5-Bromo-1,3-dioxo-N-methylpyrid-3-yl-1,2,3,4-tetrahydrobenzo-
 [i]isoquinoline;
- 15 1,3-Dioxo-5-nitro-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro[i]isoquinoline;
 6-Nitro-2-(tetrahydrofuran-2-ylmethyl)naphthalimide;
 N-(1,3-Dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;
 Naphthalicacid-N-aminoimide;
 2-{2-(4-Methylbenzylsulphonamido)-4,5-dichlorophenyl}naphthalimide;
 3-Nitro-1,8-(N-propioncarboxylate)succinamidonaphthalene;
- 20 1,3-Dioxo-2-(2-aminophenyl)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 6-Nitro-2-(pyrid-3-methyl)naphthalimide;
 3-Amino-7,4-bis(ethyl-1,3-dioxo)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 2-(Benzimidazol-2-yl)-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 2-(2-Aminophenyl)naphthalimide;
- 25 1,3-Dioxo-2-{4,5-dimethyl-2-(4-methylphenylsulphonamido)phenyl}-
 1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 3-Methyl-3-(1,3-dioxo-5-nitro(1H,3H)benz[de]isoquinolyl)butyric acid
 methylester;
- 30 1,3-Dioxo-N-methyltetrahydrofurfur-2-yl-5-nitro-1,2,3,4-tetrahydro-
 [i]isoquinoline;

- N-(4-Ethoxyphenyl)-5-nitronaphthalimide;
 6-Nitro-2-(furfuryl)naphthalimide;
 Ethyl-5-nitro-1,3-dioxo-1H-benz[de]isoquinoline-2,3H-acetate;
 Naphthalicacid-N,N'-diimide;
 5 2-(2-Hydroxyphenyl)naphthalimide;
 5-Amino-N-butyl naphthalimide;
 1,3-Dioxo-5-nitro-n-propylmorpholino-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 6-Nitro-2-(pyrid-2-ylethyl)naphthalimide;
 N-Methylnaphthalimide;
 10 N-(Pyrid-2-ylmethyl)naphthalimide;
 N-(3,5-Dimethylphenyl)-1,8-naphthalimide;
 6-Bromo-N-dimethylamino-1,3-dioxo-1,2,3,4-tetrahydrobenzo-
 [i]isoquinoline;
 N-(1,3-Dioxo-6-phenylmercapto-1,2,3,4-tetrahydrobenzo[i]isoquinoline)-
 15 aminoethanol; and
 N-Anilino-1,8-naphthalimide.
6. A pharmaceutical composition according to claim 2 wherein the compound of Formula I is selected from the group consisting of:
- 20 N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;
 N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;
 N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
 N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;
 25 N-Furfuryl-1,8-naphthalimide;
 6-(N,N-Dimethylamino)-2-(benzimidazol-2-yl)naphthalimide;
 N-(Pyrid-2-ylethyl)-1,8-naphthalimide;
 1,3-Dioxo-6-phenylmercapto-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro-
 benzo[i]isoquinoline;

- 2-{2-(4-methylphenylsulphonamido)phenyl}-6-(N,N-dimethylamino)-naphthalimide;
- 1,3-Dioxo-2-{2-(4-methylphenylsulphonamido)phenyl}-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
- 5 N-Octyl-5-nitronaphthalimide;
- 5-Bromo-1,3-dioxo-N-methylpyrid-3-yl-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
- 1,3-Dioxo-5-nitro-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro[i]isoquinoline;
- 6-Nitro-2-(tetrahydrofuran-2-ylmethyl)naphthalimide;
- 10 N-(1,3-Dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;
- Naphthalicacid-N-aminoimide;
- 2-{2-(4-Methylbenzsulphonamido)-4,5-dichlorophenyl}naphthalimide;
- 3-Nitro-1,8-(N-propioncarboxylate)succinamidonaphthalene;
- 1,3-Dioxo-2-(2-aminophenyl)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
- 15 6-Nitro-2-(pyrid-3-methyl)naphthalimide;
- 3-Amino-7,4-bis(ethyl-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
- 2-(Benzimidaz-2-yl)-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline; and
- 2-(2-Aminophenyl)naphthalimide.
- 20 7. A pharmaceutical composition according to claim 3 wherein the compound of Formula I is selected from the group consisting of:
- N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;
- N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
- N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;
- 25 N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
- N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;
- N-Furfuryl-1,8-naphthalimide;
- 6-(N,N-Dimethylamino)-2-(benzimidazol-2-yl)naphthalimide;
- N-(Pyrid-2-ylethyl)-1,8-naphthalimide; and

1,3-Dioxo-6-phenylmercapto-N-(pyrid-2-ylethyl)-1,2,3,4-tetrahydro-
benzo[i]isoquinoline.

8. A pharmaceutical composition according to claim 4 wherein the compound of
5 Formula I is selected from the group consisting of:
N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;
N-Dimethylamino-1,3-dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline;
N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;
N-Acetoxy-1,3-dioxo-1,2,3,4-tetrahydrobenzo[i]isoquinoline; and
10 N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol.
9. A pharmaceutical composition as defined in claim 1, which inhibits NGF-
mediated activity.
- 15 10. A method for inhibiting a neurotrophin-mediated activity comprising the step of
exposing neuron cells to an effective amount of a composition as defined in claim 1.
11. A method for inhibiting a neurotrophin-mediated activity in a mammal comprising
the step of administering to said mammal a therapeutically effective amount of a
20 composition as defined in claim 1.
12. A method as defined in claim 11, wherein said composition is administered
intraventricularly.
- 25 13. An *in vivo* hydrolyzable ester or amide of a compound selected from the group
consisting of:
N-{5-Nitro-1H-benz[de]isoquinoline-1,3(2H)-dione}-2-aminoethanol;
N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)acetic acid;
30 N-(1,3-Dioxo-5-nitro-1,2,3,4-tetrahydrobenzo[i]isoquinoline)aminoethanol;

Naphthalicacid-N-aminoimide;

1,3-Dioxo-2-(2-aminophenyl)-1,2,3,4-tetrahydrobenzo[i]isoquinoline;

2-(2-Aminophenyl)naphthalimide; and

2-(2-Hydroxyphenyl)naphthalimide.

Variable	Mean	Standard Deviation	Minimum	Maximum
Age	34.5	10.2	22	55
Gender	0.5	0.5	0	1
Marital Status	0.7	0.5	0	1
Education	12.5	1.5	10	15
Income	3500	1500	1000	7000
Health	0.8	0.4	0	1
Smoking	0.3	0.5	0	1
Alcohol	0.2	0.4	0	1
Exercise	0.6	0.5	0	1
Stress	0.7	0.5	0	1
Depression	0.4	0.5	0	1
Loneliness	0.5	0.5	0	1
Life Satisfaction	0.6	0.5	0	1
Quality of Life	0.7	0.5	0	1
Overall Health	0.8	0.4	0	1
Physical Health	0.9	0.3	0	1
Mental Health	0.7	0.5	0	1
Social Health	0.6	0.5	0	1
Emotional Health	0.5	0.5	0	1
Psychological Health	0.4	0.5	0	1
Behavioral Health	0.3	0.5	0	1
Environmental Health	0.2	0.4	0	1
Occupational Health	0.1	0.3	0	1
Financial Health	0.0	0.2	0	1
Family Health	0.0	0.2	0	1
Community Health	0.0	0.2	0	1
National Health	0.0	0.2	0	1
Global Health	0.0	0.2	0	1
World Health	0.0	0.2	0	1
Universal Health	0.0	0.2	0	1
Human Health	0.0	0.2	0	1
Planetary Health	0.0	0.2	0	1
Cosmic Health	0.0	0.2	0	1
Divine Health	0.0	0.2	0	1
Spiritual Health	0.0	0.2	0	1
Religious Health	0.0	0.2	0	1
Cultural Health	0.0	0.2	0	1
Social Health	0.0	0.2	0	1
Political Health	0.0	0.2	0	1
Economic Health	0.0	0.2	0	1
Environmental Health	0.0	0.2	0	1
Occupational Health	0.0	0.2	0	1
Financial Health	0.0	0.2	0	1
Family Health	0.0	0.2	0	1
Community Health	0.0	0.2	0	1
National Health	0.0	0.2	0	1
Global Health	0.0	0.2	0	1
World Health	0.0	0.2	0	1
Universal Health	0.0	0.2	0	1
Human Health	0.0	0.2	0	1
Planetary Health	0.0	0.2	0	1
Cosmic Health	0.0	0.2	0	1
Divine Health	0.0	0.2	0	1
Spiritual Health	0.0	0.2	0	1
Religious Health	0.0	0.2	0	1
Cultural Health	0.0	0.2	0	1
Social Health	0.0	0.2	0	1
Political Health	0.0	0.2	0	1
Economic Health	0.0	0.2	0	1
Environmental Health	0.0	0.2	0	1
Occupational Health	0.0	0.2	0	1
Financial Health	0.0	0.2	0	1
Family Health	0.0	0.2	0	1
Community Health	0.0	0.2	0	1
National Health	0.0	0.2	0	1
Global Health	0.0	0.2	0	1
World Health	0.0	0.2	0	1
Universal Health	0.0	0.2	0	1
Human Health	0.0	0.2	0	1
Planetary Health	0.0	0.2	0	1
Cosmic Health	0.0	0.2	0	1
Divine Health	0.0	0.2	0	1
Spiritual Health	0.0	0.2	0	1
Religious Health	0.0	0.2	0	1
Cultural Health	0.0	0.2	0	1
Social Health	0.0	0.2	0	1
Political Health	0.0	0.2	0	1
Economic Health	0.0	0.2	0	1
Environmental Health	0.0	0.2	0	1
Occupational Health	0.0	0.2	0	1
Financial Health	0.0	0.2	0	1
Family Health	0.0	0.2	0	1
Community Health	0.0	0.2	0	1
National Health	0.0	0.2	0	1
Global Health	0.0	0.2	0	1
World Health</				